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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,321	05/11/2001	Gilbert Grosdidier	3997P010	7640
7590 10/27/2005				
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		EXAMINER		
		LY, ANH VU H		
		ART UNIT PAPER NUMBER		
		2667		
DATE MAILED: 10/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,321

Applicant(s)

GROSDIDIER ET AL.

Examiner

Anh-Vu H. Ly

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-13,15-17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-13,15-17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 27, 2005 has been entered.

Claim Objections

2. Claims 2-3 and 14 are objected to because of the following informalities:

With respect to claims 2-3 and 14, "Previously Canceled" is an improper status identifier.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-6, 10-12, 15-16, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Santos et al (US Patent No. 6,684,247 B1). Hereinafter, referred to as Santos.

With respect to claims 1, 10, and 16, Santos discloses (col. 4, lines 37-41) that the database 280 includes data collected (measured) from network 100 (a communication network),

such as time delay (herein, the time delay can be either one way delay or round trip delay), bandwidth, throughput, packet loss, or any other metric associated with one or more links 120a – 120m (herein, round trip time or delay includes more than one link), and other data internally generated by monitoring program 260 (measuring packet round trip times within a communication network). Santos discloses in Fig. 6, a plot showing the average delay vs. time which including the occurrences of packet RTT measurements, e.g., on Tuesday, there are two occurrences or two peaks with the average delay of 3.42 and on Sunday, two occurrences or two peaks with the average delay of 3.55 (organizing number of occurrences of the packet round trip time measurements as an invariant distribution and applying an analytical tool to the invariant distribution to derive a plot exhibiting periodic peaks). As shown in Fig. 6, the plot includes the measured data metric, estimated metric, and the predetermined threshold. Further, as indicated by the plot, higher peaks are associated with higher delays (congestion) (extracting information from the periodic peaks regarding congestion conditions within the network).

With respect to claims 4, 15, and 19, Santos discloses (col. 5, line 67 – col. 6, line 4) that the monitoring program 260 determines a plurality of Fourier frequencies, for estimating W_k , where $W_k = 2\pi k/n$, and $k=0, 1, \dots [n/2]$ (analytical tool is selected from list comprising a Fourier transform and a wavelet transform).

With respect to claim 5, Santos discloses in Fig. 6 that periodic peaks are displayed as a function of time (period information) (determining period information from the period peaks).

With respect to claims 6, 11, and 12, Santos discloses in Fig. 6, a plot showing congestion indicators (high peaks) vs. time. Herein, congestions are related to the high bandwidth usage (determining bandwidth information from the periodic peaks).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7-9, 13, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santos et al (US Patent No. 6,684,247 B1) in view of Wilson (US Pub 2001/0032269 A1).

With respect to claims 7-9, 13, 17, and 20, Santos discloses in Fig. 6, a plot showing delay vs. time. Santos does not disclose using the bandwidth information to set a control bandwidth output of a network node; adjusting inter-packet transmission times at the network node; and adjusting control bandwidth output in response to changing network congestion conditions. Wilson discloses on page 5, 46th paragraph, that the TCP host keeps track of the sent data packets and waits for a round trip time to be completed for each of the data packets. The sending TCP host then either increases or decreases the data transmission rate upon receiving ACKs (using the bandwidth information to set a control bandwidth output of a network node). Further, Wilson discloses on page 5, 47th paragraph, that after an acknowledgment is received and the data transfer rate is adjusted (control bandwidth output is set by adjusting inter-packet

transmission times at the network node and/or the adjusting control bandwidth output in response to network congestion conditions). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the features such as setting and adjusting control bandwidth output and adjusting transmission times in Santos' system, as suggested by Wilson, to regulate network traffic based on the measured network conditions and assure quality of service.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cheng et al (US Patent No. 6,766,309 B1) discloses a method and system for adapting a network application based on classifying types of communications links using fuzzy logic.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER 2667 10/26/05